

10/583,573

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NEWS 2 AUG 10 Time limit for inactive STN sessions doubles to 40  
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NEWS 3 AUG 18 COMPENDEX indexing changed for the Corporate Source  
(CS) field  
NEWS 4 AUG 24 ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced  
NEWS 5 AUG 24 CA/CAPLUS enhanced with legal status information for  
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NEWS 6 SEP 09 50 Millionth Unique Chemical Substance Recorded in  
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NEWS 7 SEP 11 WPIDS, WPINDEX, and WPIX now include Japanese FTERM  
thesaurus  
NEWS 8 OCT 21 Derwent World Patents Index Coverage of Indian and  
Taiwanese Content Expanded  
NEWS 9 OCT 21 Derwent World Patents Index enhanced with human  
translated claims for Chinese Applications and  
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NEWS 10 NOV 23 Addition of SCAN format to selected STN databases  
NEWS 11 NOV 23 Annual Reload of IFI Databases  
NEWS 12 DEC 01 FRFULL Content and Search Enhancements  
NEWS 13 DEC 01 DGENE, USGENE, and PCTGEN: new percent identity  
feature for sorting BLAST answer sets  
NEWS 14 DEC 02 Derwent World Patent Index: Japanese FI-TERM  
thesaurus added  
NEWS 15 DEC 02 PCTGEN enhanced with patent family and legal status  
display data from INPADOCDB  
NEWS 16 DEC 02 USGENE: Enhanced coverage of bibliographic and  
sequence information  
NEWS 17 DEC 21 New Indicator Identifies Multiple Basic Patent  
Records Containing Equivalent Chemical Indexing  
in CA/CAPLUS  
NEWS 18 JAN 12 Match STN Content and Features to Your Information  
Needs, Quickly and Conveniently  
NEWS 19 JAN 25 Annual Reload of MEDLINE database  
NEWS 20 FEB 16 STN Express Maintenance Release, Version 8.4.2, Is  
Now Available for Download  
NEWS 21 FEB 16 Derwent World Patents Index (DWPI) Revises Indexing  
of Author Abstracts  
NEWS 22 FEB 16 New FASTA Display Formats Added to USGENE and PCTGEN  
NEWS 23 FEB 16 INPADOCDB and INPAFAMDB Enriched with New Content  
and Features  
NEWS 24 FEB 16 INSPEC Adding Its Own IPC codes and Author's E-mail  
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FILE 'HOME' ENTERED AT 12:49:15 ON 28 MAR 2010

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COST IN U.S. DOLLARS

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ENTRY

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FULL ESTIMATED COST

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0.22

FILE 'REGISTRY' ENTERED AT 12:49:44 ON 28 MAR 2010

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STRUCTURE FILE UPDATES: 26 MAR 2010 HIGHEST RN 1214987-89-9

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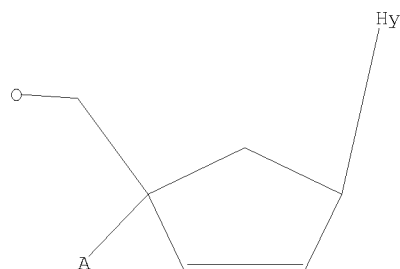
Uploading C:\Program Files\Stnexp\Queries\10583573.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 12:50:01 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 386760 TO ITERATE

0.5% PROCESSED 2000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
BATCH \*\*INCOMPLETE\*\*

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PROJECTED ITERATIONS: 7699161 TO 7771239  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 12:50:07 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 7739821 TO ITERATE

18.5% PROCESSED 1428334 ITERATIONS 27 ANSWERS

23.8% PROCESSED 1844919 ITERATIONS 47 ANSWERS

25.6% PROCESSED 1979087 ITERATIONS 47 ANSWERS

25.8% PROCESSED 2000000 ITERATIONS 47 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.59

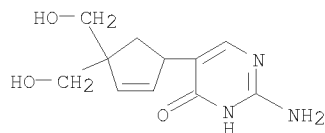
FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
BATCH \*\*INCOMPLETE\*\*

PROJECTED ITERATIONS: 7739821 TO 7739821  
PROJECTED ANSWERS: 141 TO 221

L3 47 SEA SSS FUL L1

=> d scan

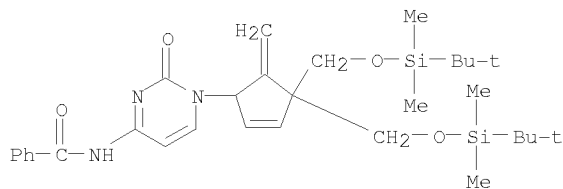
L3 47 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
IN 4(3H)-Pyrimidinone, 2-amino-5-[4,4-bis(hydroxymethyl)-2-cyclopenten-1-yl]-  
MF C11 H15 N3 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L3 47 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
IN Benzamide, N-[1-[4,4-bis[[[1,1-dimethylethyl]dimethylsilyl]oxy]methyl]-5-methylene-2-cyclopenten-1-yl]-1,2-dihydro-2-oxo-4-pyrimidinyl]-  
MF C31 H47 N3 O4 Si2



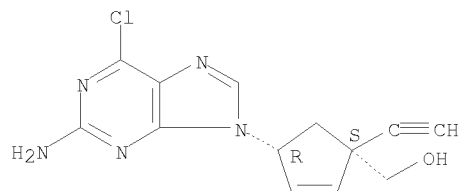
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 47 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
IN 2-Cyclopentene-1-methanol, 4-(2-amino-6-chloro-9H-purin-9-yl)-1-ethynyl-,  
(1R,4S)-rel-  
MF C13 H12 Cl N5 O

Relative stereochemistry.

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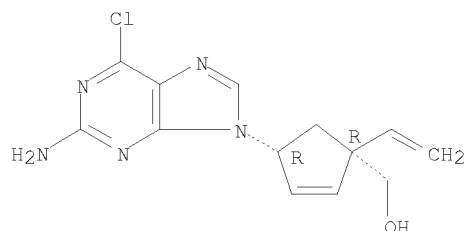
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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 47 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
IN 2-Cyclopentene-1-methanol, 4-(2-amino-6-chloro-9H-purin-9-yl)-1-ethenyl-,  
(1R,4R)-rel-  
MF C13 H14 Cl N5 O

Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	192.52	192.74

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FILE LAST UPDATED: 26 Mar 2010 (20100326/ED)  
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USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

Caplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 8 L3

=> d bib abs hitstr 1-8 14

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN  
AN 2009:1209881 CAPLUS  
DN 152:144950  
TI Synthesis and anti-HCV evaluation of 4'( $\alpha$ )-ethyl and  
2'( $\beta$ )-methyl-carbodine analogs  
AU Li, Hua; Yoo, Jin Cheol; Hong, Joon Hee  
CS BK21 { Project Team, College of Pharmacy, Chosun University, Kwangju, S.  
Korea  
SO Nucleosides, Nucleotides & Nucleic Acids (2009), 28(9), 809-820  
CODEN: NNNAFY; ISSN: 1525-7770  
PB Taylor & Francis, Inc.  
DT Journal  
LA English  
GI



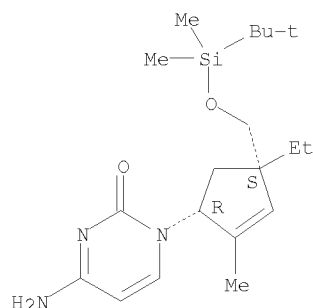
AB Novel 4'( $\alpha$ )-ethyl-2'( $\beta$ )-Me carbocyclic nucleoside analogs, e.g. I (B = cytosine, adenine), have been prepared and evaluated for inhibition of hepatitis C virus (HCV) RNA replication in cell culture. The construction of cyclopentene intermediate II was successfully made via sequential Johnson-Claisen ortho-ester rearrangement and ring-closing metathesis (RCM) starting from amide TBDMSO-CH<sub>2</sub>-C(O)-N(Me)OMe. Selective dihydroxylation and desilylation gave the target carbodine analogs. The synthesized nucleoside analogs I were assayed for their ability to inhibit HCV RNA replication in a sub-genomic replicon Huh7 cell line (LucNeo#2). However, the synthesized nucleosides neither showed any significant antiviral activity nor toxicity up to 50  $\mu$ M.

IT 1204184-85-9P 1204184-86-OP  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(synthesis and anti-HCV evaluation of 4'( $\alpha$ )-Et and 2'( $\beta$ )-methyl-carbodine analogs)

RN 1204184-85-9 CAPLUS  
CN 2(1H)-Pyrimidinone, 4-amino-1-[(1R,4S)-4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-4-ethyl-2-methyl-2-cyclopenten-1-yl]-, rel- (CA INDEX NAME)

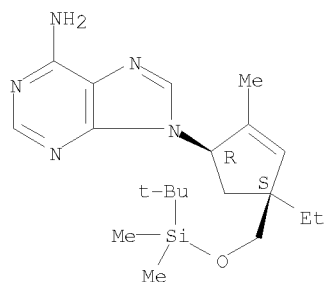
Relative stereochemistry.

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RN 1204184-86-0 CAPLUS  
CN 9H-Purin-6-amine, 9-[(1R,4S)-4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-4-ethyl-2-methyl-2-cyclopenten-1-yl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

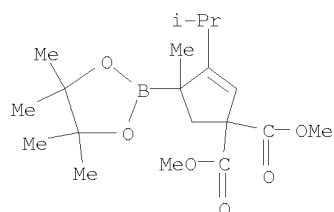


RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

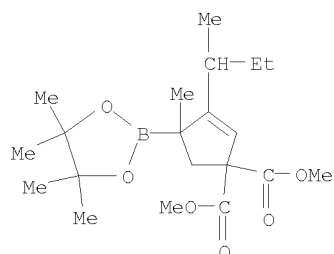
L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN  
AN 2009:1171773 CAPLUS  
DN 151:470267  
TI Pd-Catalyzed Borylative Cyclization of Allenynes and Enallenes  
AU Pardo-Rodriguez, Virtudes; Marco-Martinez, Juan; Bunuel, Elena; Cardenas, Diego J.  
CS Departamento de Quimica Organica, Universidad Autonoma de Madrid, Madrid, 28049, Spain  
SO Organic Letters (2009), 11(20), 4548-4551  
CODEN: ORLEF7; ISSN: 1523-7060  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 151:470267  
AB Pd-catalyzed cyclization of 1,5- and 1,6-allenynes and 1,5-enallenes with bis(pinacolato)diboron affords synthetically useful allylboronates and alkylboronates under smooth conditions in a formal hydroborylative carbocyclization reaction. One C-C and one C-B bond are formed in a single operation. The reaction outcome implies that different mechanisms operate for the reactions of allenynes and enallenes, resp., the actual pathway depending on the relative reactivity of the alkyne or the alkene vs. the allene moiety. The cyclized boronates obtained can be functionalized by oxidation or allylation reaction with aldehydes.  
IT 1192068-05-5P 1192068-38-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of allyl- and alkylboronates by Pd-catalyzed borylative cyclization of allenynes and enallenes)  
RN 1192068-05-5 CAPLUS  
CN 2-Cyclopentene-1,1-dicarboxylic acid, 4-methyl-3-(1-methylethyl)-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-, 1,1-dimethyl ester (CA INDEX NAME)

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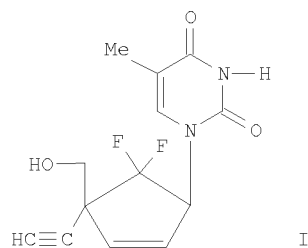


RN 1192068-38-4 CAPLUS  
CN 2-Cyclopentene-1,1-dicarboxylic acid,  
4-methyl-3-(1-methylpropyl)-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-, 1,1-dimethyl ester (CA INDEX NAME)



RE.CNT 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN  
AN 2009:964432 CAPLUS  
DN 151:403520  
TI Synthesis of (±)-4'-ethynyl-5',5'-difluoro-2',3'-dehydro-3'-deoxy-carbocyclic thymidine: a difluoromethylidene analog of promising anti-HIV agent Ed4T  
AU Kumamoto, Hiroki; Haraguchi, Kazuhiro; Ida, Mayumi; Nakamura, Kazuo T.; Kitagawa, Yasuyuki; Hamasaki, Takayuki; Baba, Masanori; Matsubayashi, Satoko Shimbara; Tanaka, Hiromichi  
CS School of Pharmaceutical Sciences, Showa University, 1-5-8 Hatanodai, Shinagawa-ku, Tokyo, 142-8555, Japan  
SO Tetrahedron (2009), 65(36), 7630-7636  
CODEN: TETRAB; ISSN: 0040-4020  
PB Elsevier Ltd.  
DT Journal  
LA English  
OS CASREACT 151:403520  
GI



AB Synthesis of ethynyl-difluoro-dehydro-deoxy-carbocyclic-thymidine I was carried out. The difluoromethylidene group of 8 was constructed by the electrophilic fluorination to the cyclopentenone by using Selectfluor. Introduction of thymine base was investigated based on the Mitsunobu reaction by employing cyclopentenyl allyl alcs. variously substituted at the 4-position. It was found the 4-methoxycarbonyl derivative 14 gave the

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highest selectivity both in terms of regio- and stereochem.

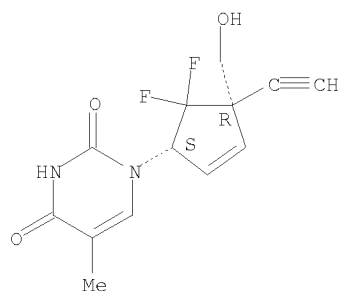
IT 1188386-13-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(crystal structure; synthesis of  
(±)-4'-ethynyl-5',5'-difluoro-2',3'-dehydro-3'-deoxy-carbocyclic  
thymidine analog of promising anti-HIV agent Ed4T via Mitsunobu  
nucleophilic substitution and electrophilic fluorination reactions)

RN 1188386-13-1 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,4S)-4-ethynyl-5,5-difluoro-4-  
(hydroxymethyl)-2-cyclopenten-1-yl]-5-methyl-, rel- (CA INDEX NAME)

Relative stereochemistry.



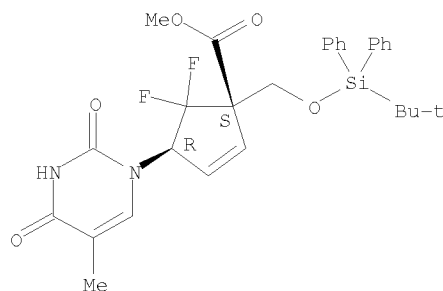
IT 1188386-26-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(synthesis of (±)-4'-ethynyl-5',5'-difluoro-2',3'-dehydro-3'-deoxy-  
carbocyclic thymidine analog of promising anti-HIV agent Ed4T via  
Mitsunobu nucleophilic substitution and electrophilic fluorination  
reactions)

RN 1188386-26-6 CAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-  
pyrimidinyl)-1-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]-5,5-  
difluoro-, methyl ester, (1R,4S)-rel- (CA INDEX NAME)

Relative stereochemistry.



IT 1188386-20-0P 1188386-24-4P 1188386-66-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of (±)-4'-ethynyl-5',5'-difluoro-2',3'-dehydro-3'-deoxy-  
carbocyclic thymidine analog of promising anti-HIV agent Ed4T via  
Mitsunobu nucleophilic substitution and electrophilic fluorination  
reactions)

RN 1188386-20-0 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,4S)-4-[[[(1,1-  
dimethylethyl)diphenylsilyl]oxy]methyl]-4-ethynyl-5,5-difluoro-2-  
cyclopenten-1-yl]-5-methyl-, rel- (CA INDEX NAME)

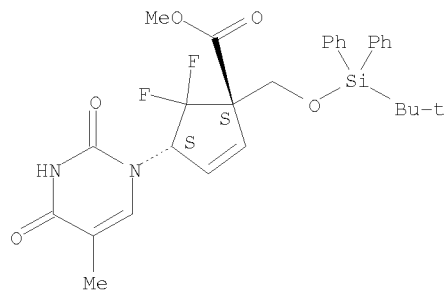
Relative stereochemistry.

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Cc1c(=O)[nH]c(=O)n(c1-c2cc(F)c(C(F)(F)C2COC(=O)Si(C)(C)C)COC(=O)Si(C)(C)C)c3ccccc3

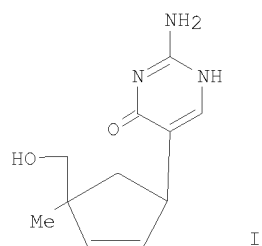
Relative stereochemistry.



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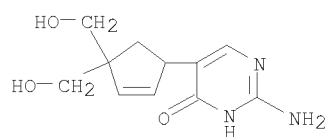
AB Novel syntheses of 4-modified cyclopentenyl pyrimidine C-nucleosides, e.g. I, were performed via C-C bond formation using SN2 alkylation via the key intermediate mesylates, which were prepared from acyclic ketone derivs. When antiviral evaluation of synthesized compound was performed against various viruses such as HIV-1, HSV-1 and HSV-2, isocytidine analog I showed moderate anti-HIV activity in CEM cell line (EC50 = 13.1  $\mu$ mol) without any cytotoxicity up to 100  $\mu$ mol.

IT 1193397-12-4P 1193397-16-8P 1193397-22-6P  
1193397-25-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(synthesis and anti-HIV activity of 4'-modified cyclopentenyl pyrimidine C-nucleosides via SN2 alkylation reaction)

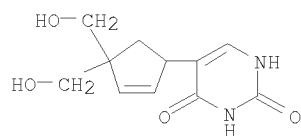
RN 1193397-12-4 CAPLUS

CN 4(3H)-Pyrimidinone, 2-amino-5-[4,4-bis(hydroxymethyl)-2-cyclopenten-1-yl]-  
(CA INDEX NAME)



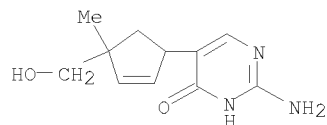
RN 1193397-16-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-[4,4-bis(hydroxymethyl)-2-cyclopenten-1-yl]-  
(CA INDEX NAME)



RN 1193397-22-6 CAPLUS

CN 4(3H)-Pyrimidinone, 2-amino-5-[4-(hydroxymethyl)-4-methyl-2-cyclopenten-1-yl]-  
(CA INDEX NAME)

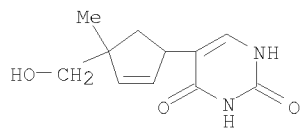


RN 1193397-25-9 CAPLUS

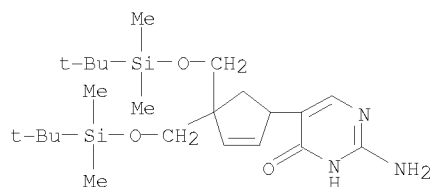
CN 2,4(1H,3H)-Pyrimidinedione, 5-[4-(hydroxymethyl)-4-methyl-2-cyclopenten-1-yl]-  
(CA INDEX NAME)

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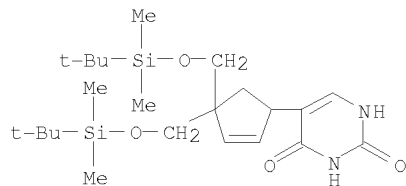
10/583,573



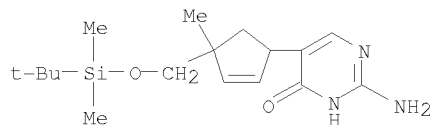
IT	1193397-11-3P	1193397-15-7P	1193397-21-5P
	1193397-24-8P		
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (synthesis and anti-HIV activity of 4'-modified cyclopentenyl pyrimidine C-nucleosides via SN2 alkylation reaction)		
RN	1193397-11-3	CAPLUS	
CN	4(3H)-Pyrimidinone, 2-amino-5-[4,4-bis[[[(1,1- dimethylethyl)dimethylsilyl]oxy]methyl]-2-cyclopenten-1-yl]- (CA INDEX NAME)		



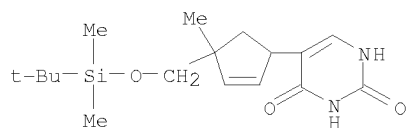
RN	1193397-15-7	CAPLUS	
CN	2,4(1H,3H)-Pyrimidinedione, 5-[4,4-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2-cyclopenten-1-yl]- (CA INDEX NAME)		



RN	1193397-21-5	CAPLUS	
CN	4(3H)-Pyrimidinone, 2-amino-5-[4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-4-methyl-2-cyclopenten-1-yl]- (CA INDEX NAME)		



RN	1193397-24-8	CAPLUS	
CN	2,4(1H,3H)-Pyrimidinedione, 5-[4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-4-methyl-2-cyclopenten-1-yl]- (CA INDEX NAME)		

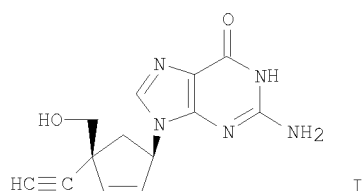


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RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN  
AN 2008:1388797 CAPLUS  
DN 151:56632  
TI Synthesis and anti-HIV-1 activity of carbocyclic versions of stavudine  
analogues using a ring-closing metathesis  
AU Liu, Lian Jin; Ko, Ok Hyun; Hong, Joon Hee  
CS BK21-Project Team, College of Pharmacy, Chosun University, Gwangju,  
501-759, S. Korea  
SO Bulletin of the Korean Chemical Society (2008), 29(9), 1723-1728  
CODEN: BKCSDE; ISSN: 0253-2964  
PB Korean Chemical Society  
DT Journal  
LA English  
OS CASREACT 151:56632  
GI

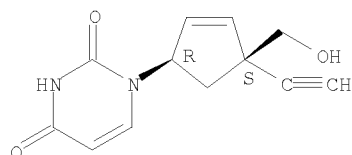


AB An efficient synthetic route for carbocyclic versions of stavudine analogs and their evaluation on antiviral activity are described. The construction of an ethynylated quaternary carbon at the 4'-position of carbocyclic nucleosides was accomplished using Claisen rearrangement of (E,Z)-3-(tert-butyltrimethylsilyloxymethyl)pent-2-en-4-yn-1-ol and ring-closing metathesis (RCM) of a diene derivative as key transformations. An antiviral evaluation of the title compds. against HIV-1, HSV-1, HSV-2, and HCMV showed that only the guanine analog I is moderately active against HIV-1 in the MT-4 cell line (EC50 = 11.91  $\mu$ mol).

IT 1160705-46-3P 1160705-49-6P  
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(synthesis and anti-HIV-1 activity of carbocyclic versions of stavudine analogs using a ring-closing metathesis)

RN 1160705-46-3 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,4S)-4-ethynyl-4-(hydroxymethyl)-2-cyclopenten-1-yl]-, rel- (CA INDEX NAME)

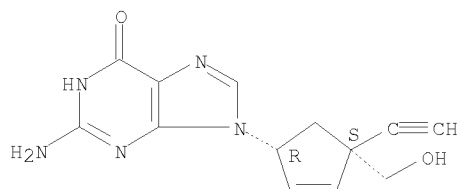
Relative stereochemistry.



RN 1160705-49-6 CAPLUS  
CN 6H-Purin-6-one, 2-amino-9-[(1R,4S)-4-ethynyl-4-(hydroxymethyl)-2-cyclopenten-1-yl]-1,9-dihydro-, rel- (CA INDEX NAME)

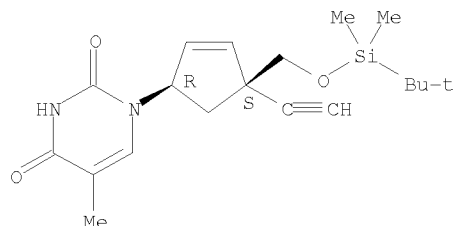
Relative stereochemistry.

10/583,573



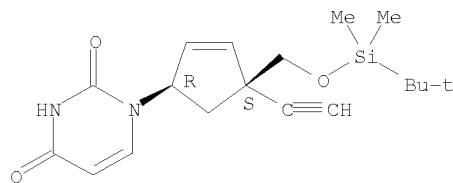
IT 1160705-43-0P 1160705-44-1P 1160705-47-4P  
1160705-48-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(synthesis and anti-HIV-1 activity of carbocyclic versions of stavudine  
analogs using a ring-closing metathesis)  
RN 1160705-43-0 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,4S)-4-[[[(1,1-  
dimethylethyl)dimethylsilyl]oxy]methyl]-4-ethynyl-2-cyclopenten-1-yl]-5-  
methyl-, rel- (CA INDEX NAME)

Relative stereochemistry.



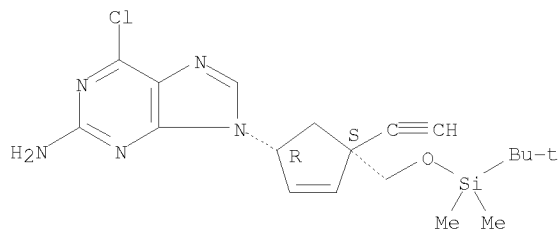
RN 1160705-44-1 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,4S)-4-[[[(1,1-  
dimethylethyl)dimethylsilyl]oxy]methyl]-4-ethynyl-2-cyclopenten-1-yl]-,  
rel- (CA INDEX NAME)

Relative stereochemistry.



RN 1160705-47-4 CAPLUS  
CN 9H-Purin-2-amine, 6-chloro-9-[(1R,4S)-4-[[[(1,1-  
dimethylethyl)dimethylsilyl]oxy]methyl]-4-ethynyl-2-cyclopenten-1-yl]-,  
rel- (CA INDEX NAME)

Relative stereochemistry.



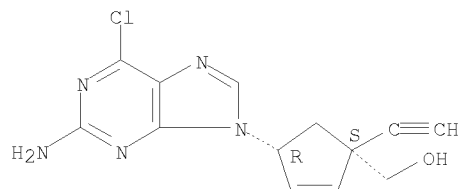
RN 1160705-48-5 CAPLUS  
CN 2-Cyclopentene-1-methanol, 4-(2-amino-6-chloro-9H-purin-9-yl)-1-ethynyl-,

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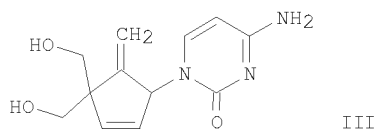
(1R,4S)-rel- (CA INDEX NAME)

Relative stereochemistry.



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN  
AN 2008:1352438 CAPLUS  
DN 151:57074  
TI Novel Synthesis and Anti-HIV Activity of 4'-Branched Exomethylene  
Carbocyclic Nucleosides Using a Ring-Closing Metathesis of Triene  
AU Li, Hua; Yoo, Jin Cheol; Hong, Joon Hee  
CS BK-21 Project Team, College of Pharmacy, Chosun University, Kwangju, S.  
Korea  
SO Nucleosides, Nucleotides & Nucleic Acids (2008), 27(12), 1238-1249  
CODEN: NNNAFY; ISSN: 1525-7770  
PB Taylor & Francis, Inc.  
DT Journal  
LA English  
OS CASREACT 151:57074  
GI



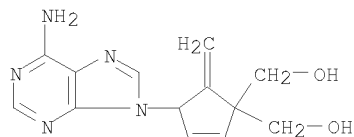
AB The exomethylene of I (RR1 = CH2) was successfully constructed from the aldehyde I (R = R1 = H) using Eschenmoser's reagents. A triene compound II was cyclized successfully using Grubbs' II catalyst to give an exomethylene carbocycle nucleus for the target compound. A Mitsunobu reaction was successfully used to condense the natural bases (adenine, thymine, uracil, and cytosine). The synthesized cytosine analog III showed moderate anti-HIV activity (EC50 = 10.67  $\mu$ M).

IT 1160714-25-9P 1160714-34-0P 1160714-35-1P  
1160714-37-3P 1160714-38-4P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(synthesis and anti-HIV activity of 4'-branched exomethylene carbocyclic nucleosides using sigmatropic rearrangement, Eschenmoser methylation, and ring-closure metathesis of triene)

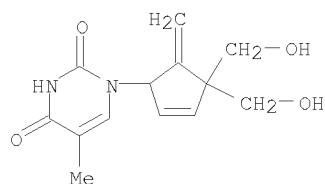
RN 1160714-25-9 CAPLUS  
CN 2-Cyclopentene-1,1-dimethanol, 4-(6-amino-9H-purin-9-yl)-5-methylene- (CA INDEX NAME)

McIntosh

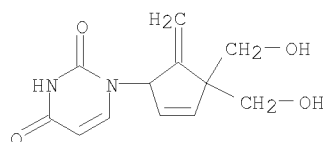
10/583,573



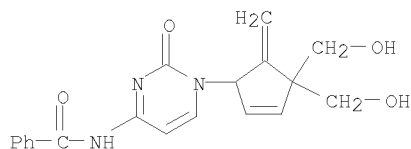
RN 1160714-34-0 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-[4,4-bis(hydroxymethyl)-5-methylene-2-cyclopenten-1-yl]-5-methyl- (CA INDEX NAME)



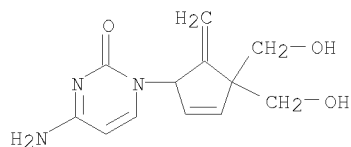
RN 1160714-35-1 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-[4,4-bis(hydroxymethyl)-5-methylene-2-cyclopenten-1-yl]- (CA INDEX NAME)



RN 1160714-37-3 CAPLUS  
CN Benzamide, N-[1-[4,4-bis(hydroxymethyl)-5-methylene-2-cyclopenten-1-yl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)



RN 1160714-38-4 CAPLUS  
CN 2(1H)-Pyrimidinone, 4-amino-1-[4,4-bis(hydroxymethyl)-5-methylene-2-cyclopenten-1-yl]- (CA INDEX NAME)

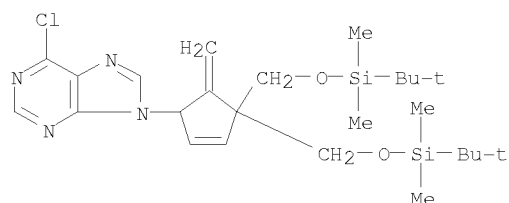


IT 1160714-22-6P 1160714-24-8P 1160714-27-1P  
1160714-30-6P 1160714-32-8P 1160714-33-9P  
1160714-36-2P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(synthesis and anti-HIV activity of 4'-branched exomethylene  
carbocyclic nucleosides using sigmatropic rearrangement, Eschenmoser  
methylenation, and ring-closure metathesis of triene)  
RN 1160714-22-6 CAPLUS  
CN 9H-Purine, 9-[4,4-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-5-

McIntosh

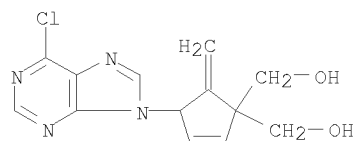
10/583,573

methylene-2-cyclopenten-1-yl]-6-chloro- (CA INDEX NAME)



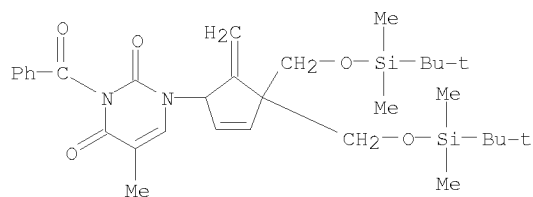
RN 1160714-24-8 CAPLUS

CN 2-Cyclopentene-1,1-dimethanol, 4-(6-chloro-9H-purin-9-yl)-5-methylene-  
(CA INDEX NAME)



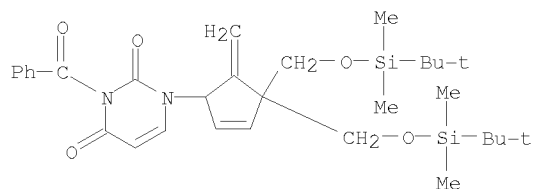
RN 1160714-27-1 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[4,4-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-5-methylene-2-cyclopenten-1-yl]-5-methyl- (CA INDEX NAME)



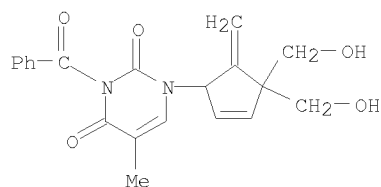
RN 1160714-30-6 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[4,4-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-5-methylene-2-cyclopenten-1-yl]-5-methyl- (CA INDEX NAME)



RN 1160714-32-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[4,4-bis(hydroxymethyl)-5-methylene-2-cyclopenten-1-yl]-5-methyl- (CA INDEX NAME)

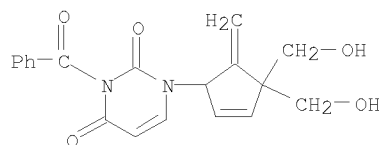


McIntosh

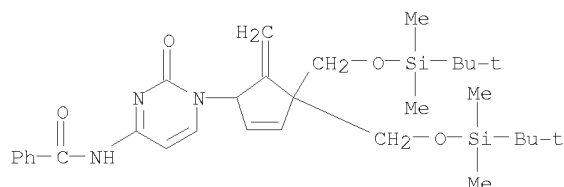


10/583,573

RN 1160714-33-9 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[4,4-bis(hydroxymethyl)-5-methylene-2-cyclopenten-1-yl]- (CA INDEX NAME)



RN 1160714-36-2 CAPLUS  
CN Benzamide, N-[1-[4,4-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-5-methylene-2-cyclopenten-1-yl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

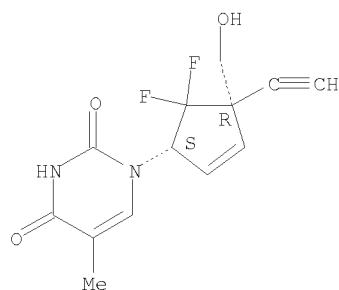
L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN  
AN 2008:1153976 CAPLUS  
DN 150:252109  
TI Synthesis and antiviral evaluation of  
(±)-4'-ethynyl-5'-difluorocarbocyclic-d4T analogue  
AU Kumamoto, Hiroki; Haraguchi, Kazuhiro; Ida, Mayumi; Tanaka, Hiromichi;  
Hamasaki, Takayuki; Baba, Masanori  
CS School of Pharmaceutical Sciences, Showa University, 1-5-8 Hatanodai,  
Shinagawa-ku, Tokyo, 142-8555, Japan  
SO Nucleic Acids Symposium Series (2008), 52(1), 609-610  
CODEN: NASSCJ; ISSN: 1746-8272  
URL: <http://nass.oxfordjournals.org/content/vol52/issue1/index.dtl>  
PB Oxford University Press  
DT Journal; (online computer file)  
LA English  
AB Synthesis of (±)-4'-ethynyl-5'-difluorocarbocyclic-d4T analog 8, in  
which the furanose ring oxygen of usual nucleosides is replaced with a  
geminal-difluoromethylidene group, was carried out. Electrophilic  
fluorination with Selectfluor was applied to construct a  
gem-di-fluorocyclopentenone system to give 12. Regioselective  
introduction of thymine base was performed under the Mitsunobu conditions  
by employing the 4-methoxy-carbonyl derivative 13. Antiviral evaluation of 8  
was also examined  
IT 1119274-67-7P 1119274-73-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(synthesis and antiviral effect of  
(±)-4'-ethynyl-5'-difluorocarbocyclic-d4T analog)  
RN 1119274-67-7 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1S,4R)-4-[[[(1,1-  
dimethylethyl)diphenylsilyl]oxy]methyl]-4-ethynyl-5,5-difluoro-2-  
cyclopenten-1-yl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

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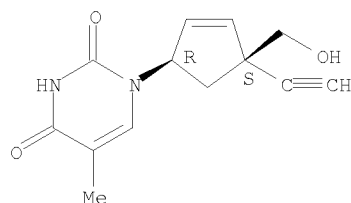


10/583,573



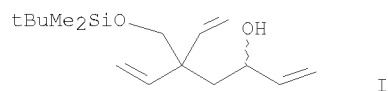
IT 1119274-59-7  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(synthesis and antiviral effect of  
(±)-4'-ethynyl-5'-difluorocarbocyclic-d4T analog)  
RN 1119274-59-7 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,4S)-4-ethynyl-4-(hydroxymethyl)-2-cyclopenten-1-yl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN  
AN 2008:748000 CAPLUS  
DN 150:214607  
TI An efficient synthesis of 4'-vinylated carboxylic nucleoside analogues via  
two directional ring-closing metathesis  
AU Li, Hua; Hong, Joon Hee  
CS BK21-Project Team, College of Pharmacy, Chosun University, Gwangju,  
501-759, S. Korea  
SO Bulletin of the Korean Chemical Society (2008), 29(5), 993-997  
CODEN: BKCSDE; ISSN: 0253-2964  
PB Korean Chemical Society  
DT Journal  
LA English  
OS CASREACT 150:214607  
GI



AB Two-directional ring-closing metathesis (RCM) was applied successfully to  
the synthesis of 4'-vinylated carbocyclic nucleoside analogs from the  
trivinyl intermediate I, which was readily made using a sequential Claisen  
rearrangement starting from Weinreb amide Me3CMe2SiOCH2CONMeOMe. An  
antiviral evaluation of the synthesized compds. against various viruses  
such as HIV, HSV-1, HSV-2, and HCMV revealed that the corresponding guanine  
analog has moderate anti-HIV activity in the MT-4 cell line (EC50 = 10.2  
μM).  
IT 1112877-76-5P

McIntosh

10/583,573

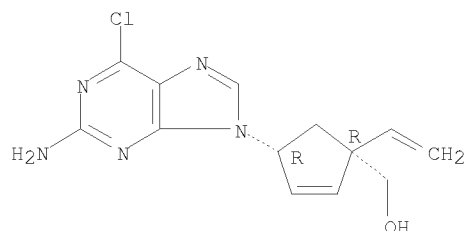
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation of antiviral vinylated carboxylic nucleoside analogs via two-directional ring-closing metathesis)

RN 1112877-76-5 CAPLUS

CN 2-Cyclopentene-1-methanol, 4-(2-amino-6-chloro-9H-purin-9-yl)-1-ethenyl-, (1R,4R)-rel- (CA INDEX NAME)

Relative stereochemistry.



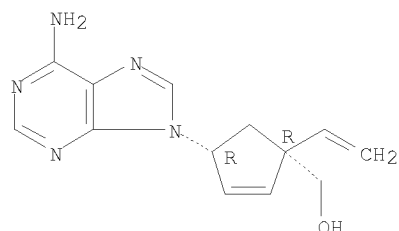
IT 1112877-71-0P 1112877-74-3P 1112877-78-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation of antiviral vinylated carboxylic nucleoside analogs via two-directional ring-closing metathesis)

RN 1112877-71-0 CAPLUS

CN 2-Cyclopentene-1-methanol, 4-(6-amino-9H-purin-9-yl)-1-ethenyl-, (1R,4R)-rel- (CA INDEX NAME)

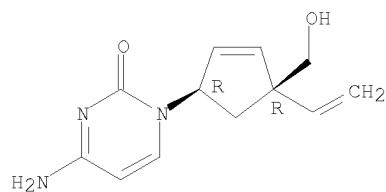
Relative stereochemistry.



RN 1112877-74-3 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(1R,4R)-4-ethenyl-4-(hydroxymethyl)-2-cyclopenten-1-yl]-, rel- (CA INDEX NAME)

Relative stereochemistry.



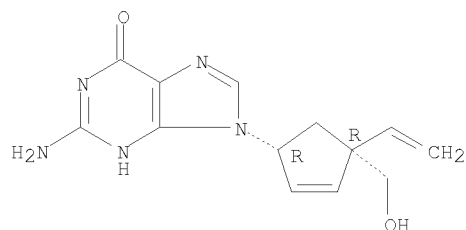
RN 1112877-78-7 CAPLUS

CN 6H-Purin-6-one, 2-amino-9-[(1R,4R)-4-ethenyl-4-(hydroxymethyl)-2-cyclopenten-1-yl]-1,9-dihydro-, rel- (CA INDEX NAME)

Relative stereochemistry.

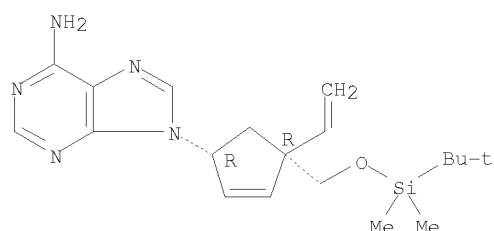
McIntosh

10/583,573



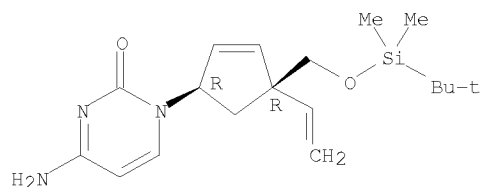
IT 1112877-63-0P 1112877-65-2P 1112877-68-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation of antiviral vinylated carboxylic nucleoside analogs via  
two-directional ring-closing metathesis)  
RN 1112877-63-0 CAPLUS  
CN 9H-Purin-6-amine, 9-[(1R,4R)-4-[[[(1,1-  
dimethylethyl)dimethylsilyl]oxy]methyl]-4-ethenyl-2-cyclopenten-1-yl]-,  
rel- (CA INDEX NAME)

Relative stereochemistry.



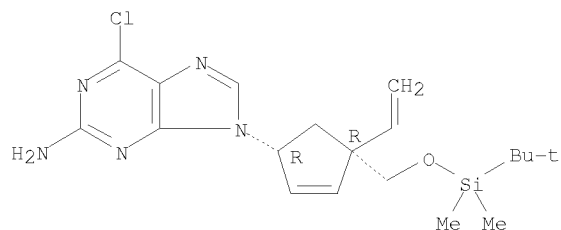
RN 1112877-65-2 CAPLUS  
CN 2(1H)-Pyrimidinone, 4-amino-1-[(1R,4R)-4-[[[(1,1-  
dimethylethyl)dimethylsilyl]oxy]methyl]-4-ethenyl-2-cyclopenten-1-yl]-,  
rel- (CA INDEX NAME)

Relative stereochemistry.



RN 1112877-68-5 CAPLUS  
CN 9H-Purin-2-amine, 6-chloro-9-[(1R,4R)-4-[[[(1,1-  
dimethylethyl)dimethylsilyl]oxy]methyl]-4-ethenyl-2-cyclopenten-1-yl]-,  
rel- (CA INDEX NAME)

Relative stereochemistry.



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

McIntosh

10/583,573

RE.CNT 26      THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT